

Abstract

A through-air dryer is disclosed. The through-air dryer includes a cylindrical deck made from a plurality of deck plates that support a throughdrying fabric. The deck plates are supported by opposing hubs. Each of the hubs is in communication with a bearing that is mounted to a stationary shaft for allowing the cylindrical deck and the hubs to rotate. The bearings are positioned so as to create a through-air dryer structure that remains stable during operation and allows for easy calculation of loads on the dryer.